This listing of claims will replace all prior versions, and listings, of claims in the application.

**Listing of Claims:**

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1. (Currently amended) An automated method for correcting for interference in mean cell hemoglobin content (MCH) and mean cell hemoglobin concentration (MCHC) values in a blood sample, ~~plasma,~~ or other sample having red blood cells, ~~containing a heme-colored interfering substance~~ wherein the sample comprises an exogenous heme-colored blood substitute and is analyzed on an automated hematology analyzer, comprising:

(a) dividing cellular hemoglobin concentration (gm/dL), determined by cell-by-cell measurements, by red blood cell concentration (cells/mm3);

(b) multiplying the value of (a) by a first constant to correct for differences in units of dimensions to obtain a corrected mean cell hemoglobin content (MCH) value (~~gm/dLb~~ picograms/cell);

(c) dividing the cellular hemoglobin concentration (gm/dL), determined by cell-by-cell measurements, by the hematocrit (HCT), (%), value; and

(d) multiplying the value of (c) by a second constant to correct for differences in units of dimensions to obtain a corrected mean cell hemoglobin concentration (MCHC) value (gm/dL)~~.~~; thereby correcting for interference in the mean cell hemoglobin content (MCH) and mean cell hemoglobin concentration (MCHC) values in the sample.

2. (Currently amended) The method according to claim 1, wherein the ~~interfering substance~~ exogenous heme-colored blood substitute in the blood sample is an extracellular hemoglobin product or an oxygen-carrying blood substitute.

3. (Original) The method according to claim 1, wherein the blood sample is a normal blood sample or an abnormal blood sample.

4. (Cancelled)

5. (Currently amended) The method according to claim ~~4~~ 3, wherein the abnormal blood sample is derived from an individual having a pathological condition.

6. (Original) The method according to claim 5, wherein the pathological condition is selected from the group consisting of blood loss during surgery, blood loss during trauma, and hemorrhagic shock.

7. (Currently amended) The method according to claim 2, wherein the extracellular hemoglobin product or the oxygen-carrying blood substitute is ~~selected from the group consisting of~~ recombinant human hemoglobin~~, cross-linked hemoglobin, polymerized, cross-linked hemoglobin, purified bovine hemoglobin and hemoglobin coupled to polyethylene glycol (PEG-HGB)~~.

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8. (Currently amended) The method according to claim ~~2~~ 7, wherein the ~~cell-free extracellular hemoglobin product~~ recombinant human hemoglobin is ~~hemoglobin~~ isolated and purified from ~~human or~~ animal blood.

9. (Currently amended) A system for ~~alerting a practitioner of the need to correct~~ correcting mean cell hemoglobin content (MCH) and mean cell hemoglobin concentration (MCHC) values in a blood sample ~~containing~~ which comprises an exogenous heme-colored blood substitute~~,~~ and ~~for correcting said values using~~ is analyzed on an automated hematology analyzer, comprising:

a) labeling a blood collection container to indicate that the blood sample contained therein ~~contains~~ comprises an exogenous heme-colored blood substitute; ~~and~~

b) correcting automatically for interference in mean cell hemoglobin content (MCH) and mean cell hemoglobin concentration (MCHC) values based on the labeling indication of (a), wherein said correction is performed by the automated analyzer and comprises formula (1):

(1) MCH (corrected), (picograms/cell) =

Cellular hemoglobin (gm/dL) (x constant to correct for units of dimensions)
Red Blood Cell concentration (cells/mm3);

and formula (2):

(2) MCHC (corrected), (gm/dL) =

Cellular hemoglobin (gm/dL) (x constant to correct for units of dimensions)
HCT (%);

~~wherein the corrected mean cell hemoglobin (MCH) and mean cell hemoglobin concentration (MCHC) values recover the original whole blood values for mean cell hemoglobin (MCH) and mean cell hemoglobin concentration (MCHC) in the analyzed blood sample.~~ ; and thereby correcting the mean cell hemoglobin content (MCH) and mean cell hemoglobin concentration (MCHC) values in the sample.

10. (Currently amended) The system according to claim 9, wherein the exogenous heme-colored blood substitute is an oxygen-carrying hemoglobin substitute, ~~selected from the group consisting of~~ recombinant human hemoglobin~~, cross-linked hemoglobin, polymerized, crosslinked hemoglobin, purified bovine hemoglobin and hemoglobin coupled to polyethylene glycol (PEG-HGB)~~.

11. (Currently amended) The system according to claim 10, wherein the ~~exogenous blood substitute~~ recombinant human hemoglobin is ~~hemoglobin~~ isolated and purified from ~~human or~~ animal blood.

12. (Currently amended) The system according to claim 9, wherein the labeling of the blood container comprises a sticker affixed to the container, said sticker being color-coded and/or bar-coded to indicate that the blood sample contained therein comprises an exogenous heme-colored blood substitute.

13. (Original) The system according to claim 12, wherein the labeling comprises a bar code.

14. (Currently amended) The system according to claim 9, wherein the constant ~~to correct for units of dimensions~~ in formula 1 is 10, and the constant ~~to correct for units of dimensions~~ in formula 2 is 100.

15. (Currently amended) A method for automatic correction of interference ~~to~~ in a blood chemistry value in a blood, plasma, or serum sample analyzed on an automated hematology analyzer, wherein said interference is due to the presence of an exogenous heme-colored blood substitute in the blood, plasma, or serum sample, comprising:

a) labeling a sample collection container to indicate that the sample contained therein contains the exogenous heme-colored blood substitute, wherein said label signals correction of the blood chemistry value; and

b) correcting automatically the blood chemistry value based on the labeling signal of (a), wherein the correction is performed by the automated hematology analyzer employing the plasma hemoglobin value automatically generated by the automated hematology analyzer; ~~and wherein the corrected blood chemistry value recovers the original whole blood chemistry result for the blood chemistry value~~ thereby correcting for interference in the analyzed ~~blood~~ sample.

16. (Currently amended) A method for automatic correction of interference ~~to~~ in a blood chemistry value in a blood, plasma, or serum sample, wherein said interference is due to the presence of an exogenous heme-colored blood substitute in the sample, comprising:

a) labeling a sample collection container to indicate that the blood, plasma, or serum sample contained therein contains the exogenous heme-colored blood substitute, wherein said label signals correction of the blood chemistry value; and

b) correcting automatically the blood chemistry value based on the labeling signal of (a), wherein the correction is performed by the automated analyzer employing the plasma hemoglobin value automatically generated by the analyzer; wherein the corrected chemistry value is determined by subtracting from the reported chemistry result the following product: (correction factor x plasma or serum hemoglobin value scaled to the appropriate units of dimensions of the reported analytes), ~~; and further wherein the corrected blood chemistry value recovers the original blood chemistry result for the blood chemistry value~~ thereby correcting for interference in the analyzed sample.

17. (Currently amended) The method according to claim 15 or claim 16, wherein the exogenous heme-colored blood substitute is an oxygen-carrying hemoglobin substitute, ~~selected from the group consisting of~~ recombinant human hemoglobin~~, cross-linked hemoglobin, polymerized, crosslinked hemoglobin, purified bovine hemoglobin and hemoglobin coupled to polyethylene glycol (PEG HGB)~~.

18. (Currently amended) The method according to claim 17, wherein the ~~exogenous blood substitute~~ recombinant human hemoglobin is ~~hemoglobin~~ isolated and purified from ~~human or~~ animal blood.

19. (Currently amended) The method according to claim 15 or claim 16, wherein the labeling of the ~~blood~~ container comprises a sticker affixed to the container, said sticker being color-coded and/or bar-coded to indicate that the ~~blood~~ sample contained therein comprises an exogenous heme-colored blood substitute.

20. (Original) The method according to claim 19, wherein the labeling comprises a bar code.

21. (Currently amended) The method according to claim 15 or claim 16, wherein the blood chemistry value is selected from albumin, alkaline phosphatase (ALP), alanine transaminase (ALT), amylase, aspartate transaminase (AST), urea, calcium, creatinine kinase (CK), bicarbonate, creatinine, creatinine phosphokinase, muscle/brain (CKMB), total bilirubin, gamma glutamyl transferase (GGT), glucose, lactate dehydrogenase (LDH), magnesium, phosphate, lipase, mean cell hemoglobin content (~~MHC~~ MCH) and mean cell hemoglobin concentration (MCHC).

22. (Currently amended) The method according to claim 21, wherein the blood chemistry value is selected from albumin, alkaline phosphatase (ALP), amylase, calcium, bicarbonate, gamma glutamyl transferase (GGT), lactate dehydrogenase (LDH), mean cell hemoglobin content (MCH), mean cell hemoglobin concentration (MCHC) and total bilirubin.

23. (Original) The method according to claim 15, wherein the corrected chemistry value is determined by subtracting from the reported chemistry result the following product: (correction

factor x plasma or serum hemoglobin value scaled to the appropriate units of dimensions of the reported analytes).

24 (New) The method according to claim 1, wherein the first constant is 10 and the second constant is 100.